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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,829	01/20/2006	Timo Saares	1503-0176PUS1	8880

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EXAMINER

AKRAM, IMRAN

ART UNIT	PAPER NUMBER
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1795

NOTIFICATION DATE	DELIVERY MODE
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06/04/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/532,829	Applicant(s) SAARES, TIMO	
	Examiner IMRAN AKRAM	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment. However, the same references apply to the rejection, albeit in different form.
2. Applicant argues on page 9 of the Arguments that the Bohn reference does not disclose substantially circular slots and that the pins do not rotate. Instead, "the pins can only be moved back and forth within a very restricted distance in the slots." As figure 3 of Bohn discloses, the slots are substantially circular. The fact that the pins can move back and forth within these slots means they are rotating. Nothing about the claims discloses the ability to revolve or that the slots are completely circular and not substantially circular.
3. A complete translation of Bohn is now provided and henceforth used for citation purposes.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (US 4,583,992) in view of Bohn (WO 87/06680).

7. Regarding claims 1 and 2, Rogers discloses a grate **50** for a gas generator **10** adapted to operate in the gasifier of the gas generator so as to provide support to solid fuel fed thereon for combustion such as wood chips, peat, bark and hog fuel from forest harvesting and the like refuse fuel fed thereon, the cross sections of the gasifier and thus also its grate being substantially circular in shape (see figure 2) comprising: substantially circular slots **52** formed in the grate, said substantially circular slots having the same center point but a varying radius (see figure 3), annular grate rings (not labeled, space between the slots) formed in the grate, said annular grate rings being formed between the substantially circular slots, said annular grate ring being stationary with respect to the gasifier (when not being rotated); and the grate having placed thereon a mass of balls **54** with a diameter larger than the width of the grate slots, characterized in that below the grate is mounted a member **36** that is rotatable about the center axis of the grate (column 2, lines 64-68).

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8. Rogers does not disclose projections extending upward through the circular grate slots. Bohn—in an invention for a gasifier—discloses the rotatable member is a rod-supported rake **46** and that the rake projections are pegs **38** extending upward from the rake rod so far that the tips of the pegs reach higher than the top surface of the grate rings (see figure 2). The tips of Bohn are "swept" in a horizontal direction (bottom of page 3 of translation) and since the grate slots of Bohn are substantially circular, this results in a rotating motion. The purpose of these pegs, as disclosed on page 1 of the translation, is to vibrate and shake up particles. It would have been obvious to one having ordinary skill in the art at the time of invention to add the pegs and horizontally circular slots of Bohn to the circular grate openings of Rogers to break up particles in a rotating motion more effectively than the balls would do on their own.

9. Regarding claims 3 and 7, Rogers discloses that the grate rings are connected to each other by a support structure **68** that is situated above the top surface of the grate and simultaneously provides two or more compartments for the balls (see figure 3).

10. Regarding claim 4, Rogers discloses that that the support structure **68** of the grate rings comprises two planar members orthogonally crossed with each other so as to form four compartments for the balls (see figure 3), whereby the height of the planar members is selected to be greater than one and half times the ball diameter (see figure 1).

11. Regarding claims 5 and 8-10, Rogers discloses that that the balls are made from a ceramic material (column 3, lines 9-11).

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12. Regarding claims 6 and 11-13, Rogers discloses that the rotating speed of the member **46** is adjustable (column 9, lines 33-42).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **IMRAN AKRAM** whose telephone number is (571)270-3241. The examiner can normally be reached on 10-7 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/
Primary Examiner, Art Unit 1795

IA